VII. ABSTRACT

Method and apparatus are disclosed for controlling the delivery of power to DC components such as computer components, microprocessors or the like. Designs of voltage regulation modules (112) are presented which are appropriate for faster components, lower voltages, and higher currents. Embodiments are especially suited to applications which cause rapid changes in the conductance of the load, even in the sub-microsecond time domain as is common in computer applications and the like and in powering electronics equipment, especially a distributed system and especially a system wherein low voltage at high current is required. Embodiments and sub elements provide energy storage for low voltage, high current electronic loads, an ability to supply current with rapid time variation, providing extremely low inductance connections, permitting VRM's (112) and the like to be located relatively remotely from the powered electronic load (186), and a steady voltage from a transformer isolated, high frequency AC to DC converter (102) under varying load without the necessity for feedback control, among other aspects.